

CTE Business and Information Technology Information Technology Academy Courses

Information Technology: Information Support and Services (IT INFO SS)

5230

*CIP Code: 52.0411 Customer Services Support/Call Center/Teleservice Operation
52.0207 Customer Service Management; 11.0103 Information Technology; 11.0802 Data
Modeling/Warehousing and Database Administration*

Information Technology: Information Support and Services is a career and technical education business and information technology course that will prepare students for careers in business and industry dealing with support and services in information technology. Students will gain the necessary skills to implement computer systems and deploy software solutions, provide technical assistance, and manage information systems with attention to security. Students will develop an understanding of IT professionalism including the importance of ethics, communication skills, and knowledge of the “virtual workplace.” Skills needed to acquire related certifications will be an integral part of this program; e.g., Microsoft MOS, Novell CNA, CompTIA A+, Security+, etc. Essential skill and knowledge areas include but are not limited to: General Computer Usage Skills; Management Information Systems; Basic Network Systems; Basic Programming; Basic Interactive Multimedia Development; Business Skills; and Management Skills.

- Recommended Grade Level: 10-12
- Recommended Prerequisites: Algebra I, Digital Communication Tools and Computer Applications
- Credits: A two- to eight-credit course over two to eight semesters
- May be offered over a two- or three-year period by titling the course Beginning, Intermediate, or Advanced
- A Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diploma elective and directed elective course
- A Career Academic Sequence, Career-Technical program, or Flex Credit course
- Course content standards and performance expectations and Indiana Academic Standards integrated at:
<http://www.doe.in.gov/octe/bme/curriculum/contentstandardsvoc.htm>
- Teacher Requirements: A vocationally licensed (CTE) business or appropriate occupational specialist (CTE) license teacher must teach this course:
<http://doe.in.gov/dps/licensing/assignmentcode>
- Funding: State Additional Pupil Count (APC) vocational funding available and must be taught by a vocationally licensed (CTE) business or appropriate occupational specialist teacher: <http://doe.in.gov/octe/>
- Career Clusters: A recommended component for several career pathways in the Business, Management & Administration, Information Technology and Science, Technology, Engineering & Mathematics career clusters
- Career pathway information: <http://www.doe.in.gov/octe/facs/CrrClstrGrid.html>

Information Technology: Interactive Media (IT INTMED)

5232

CIP Code: 11.0801 Web Page, Digital/Multimedia and Information Resources Design; 11.0803 Computer Graphics

Information Technology: Interactive Media is a career and technical education business and information technology course that will prepare students for careers in business and industry working with interactive media. Students will become competent in creating, designing, and producing secure interactive media products and services for business and industry. This program of study emphasizes the development of digitally-generated or computer-enhanced products using multimedia technologies. Students will develop an understanding of IT professionalism including the importance of ethics, communication skills, and knowledge of the “virtual workplace.” Skills needed to acquire related certifications will be an integral part of this program; e.g., CIW (Certified Internet Webmaster) Foundations, Application Development, E-Commerce, Enterprise Development; Microsoft MCSD, Visual Basic, C/C++, Java, etc. Essential skill areas include but are not limited to: Animation; Media Design; Interactive Digital Media; GUI Interfaces; Instructional Application; Application Design; Authoring Languages; Audio/Visual Production; and Digital Imaging.

- Recommended Grade Level: 10-12
- Recommended Prerequisites: Algebra I, Digital Communication Tools and Computer Applications
- Credits: A two- to eight-credit course over two to eight semesters
- May be offered over a two- or three-year period by titling the course Beginning, Intermediate, or Advanced
- A Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diploma elective and directed elective course
- A Career Academic Sequence, Career-Technical program, or Flex Credit course
- Course content standards and performance expectations and Indiana Academic Standards integrated at:
<http://www.doe.in.gov/octe/bme/curriculum/contentstandardsvoc.htm>
- Teacher Requirements: A vocationally licensed (CTE) business or appropriate occupational specialist (CTE) license teacher must teach this course:
<http://doe.in.gov/dps/licensing/assignmentcode>
- Funding: State Additional Pupil Count (APC) vocational funding available and must be taught by a vocationally licensed (CTE) business or appropriate occupational specialist teacher: <http://doe.in.gov/octe/>
- Career Clusters: A recommended component for several career pathways in the Business, Management & Administration, Information Technology and Science, Technology, Engineering & Mathematics career clusters
- Career pathway information: <http://www.doe.in.gov/octe/facs/CrrClstrGrid.html>

Information Technology: Network Systems (IT NET SYST)

5234

CIP Code: 11.0901 Computer Systems Networking and Telecommunications

Information Technology: Network Systems is a career and technical education business and information technology course that will prepare students for careers in business and industry working with network systems. Students will acquire skills needed to plan, design, install, maintain, and manage network solutions used in business and industry. Students will develop an understanding of IT professionalism including the importance of ethics, communication skills, and knowledge of the “virtual workplace.” Skills acquired will assist students in obtaining related networking systems certifications; e.g., A+, Cisco CCNA and CCNP, Security+, Network+, Novell CNA and CNE, Microsoft MCSE, etc. Essential skill areas include but are not limited to: Computer Hardware Maintenance; Network Operations; Network Administration; Basic Network Design Theory; Network Troubleshooting; Network Security; and Wireless Communications.

- Recommended Grade Level: 10-12
- Recommended Prerequisites: Algebra I, Digital Communication Tools and Computer Applications
- Credits: A two- to eight-credit course over two to eight semesters
- May be offered over a two- or three-year period by titling the course Beginning, Intermediate, or Advanced
- A Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diploma elective and directed elective course
- A Career Academic Sequence, Career-Technical program, or Flex Credit course
- Course content standards and performance expectations and Indiana Academic Standards integrated at:
<http://www.doe.in.gov/octe/bme/curriculum/contentstandardsvoc.htm>
- Teacher Requirements: A vocationally licensed (CTE) business or appropriate occupational specialist (CTE) license teacher must teach this course:
<http://doe.in.gov/dps/licensing/assignmentcode>
- Funding: State Additional Pupil Count (APC) vocational funding available and must be taught by a vocationally licensed (CTE) business or appropriate occupational specialist teacher: <http://doe.in.gov/octe/>
- Career Clusters: A recommended component for several career pathways in the Business, Management & Administration, Information Technology and Science, Technology, Engineering & Mathematics career clusters
- Career pathway information: <http://www.doe.in.gov/octe/facs/CrrClstrGrid.html>

Information Technology: Programming and Software Development (IT PROGSD)

5236

CIP Code: 11.0201 Computer Programming/Programmer, General

Information Technology: Programming and Software Development is a career and technical education business and information technology course that will prepare students for careers in business and industry as providers of software solutions. Students will learn to design, develop, test, document, implement and maintain secure computer systems and software. Students will develop an understanding of IT professionalism including the importance of ethics, communication skills, and knowledge of the “virtual workplace”. Preparation for AP Programming A and AB as well as skills needed to acquire certifications will be an integral part of this program; e.g., Microsoft MCSD, Visual Basic, C/C++, Java, SQL, RDMS, etc. Essential skill areas include but are not limited to: Computer System Architecture; Information Systems Analysis; Principles of Programming & Software Design; Related Database Design; SQL/SQL Programming; and Client and Server Side Programming.

- Recommended Grade Level: 10-12
- Recommended Prerequisites: Algebra I, Algebra II, and Computer Applications
- Credits: A two- to eight-credit course over two to eight semesters
- May be offered over a two- or three-year period by titling the course Beginning, Intermediate, or Advanced
- A Core 40, Core 40 with Academic Honors, and Core 40 with Technical Honors diploma elective and directed elective course
- A Career Academic Sequence, Career-Technical program, or Flex Credit course
- Course content standards and performance expectations and Indiana Academic Standards integrated at:
<http://www.doe.in.gov/octe/bme/curriculum/contentstandardsvoc.htm>
- Teacher Requirements: A vocationally licensed (CTE) business or appropriate occupational specialist (CTE) license teacher must teach this course:
<http://doe.in.gov/dps/licensing/assignmentcode>
- Funding: State Additional Pupil Count (APC) vocational funding available and must be taught by a vocationally licensed (CTE) business or appropriate occupational specialist teacher: <http://doe.in.gov/octe/>
- Career Clusters: A recommended component for several career pathways in the Business, Management & Administration, Information Technology and Science, Technology, Engineering & Mathematics career clusters
- Career pathway information: <http://www.doe.in.gov/octe/facs/CrrClstrGrid.html>